

REMARKS

Claims 1-10 are pending in the application. Claims 1-2, 4 and 6-10 have been amended. The second occurrence of claim 10 has been cancelled.

Claims 1-3, 5-10 stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over U.S. Patent No. 5,706,416 to Mann et al. further in view of U.S. Patent No. 4,618,766 to Van der Mast et al.

According to claims 1 and 2, multiple pairs of transmission electron beam images of multiple transmission electron beam images of multiple objects each having a different tilt angle with respect to the optical axis are stored as said reference images.” Claim 6 recites a similar limitation. Mann and Van der Mast both fail to teach all of the limitations of independent claims 1-2 and 6. Accordingly, Applicants respectfully request withdrawal of the rejection.

In the present invention, each of the reference images consists of pairs and each of the pairs consist of an original image and polar coordinate converted image. Both Mann and Vander Mast fail to teach these limitations. The present invention includes storing multiple images with different tilt angles. Although the Office Action points to several descriptions and figures to teach the limitations of the independent claims, these features are not found in the descriptions or figures referenced by the Examiner.

Although the Office Action states that Mann and Van der Mast disclose “computing the correlation between the specified object image and the reference image” as recited in claims 1 and 2, neither of the references actually discloses this limitation. Additionally, claim 6 recites “computation of correlation between the image of the specified object and the images of other objects”, which is not taught by either reference. These are important aspects of the claimed invention. For example, they may be used to achieve the advantages set forth in lines 16 to 21 on page 7 of the specification.

Although Van der Mast discloses a transmission electron microscope, it is impossible to derive the present invention from the combination of Mann and Van der Mast because neither of the references disclose storing "multiple objects each having a different tilt angle." Mann and Van der Mast both fail to teach all of the limitations of independent claims 1-2 and 6. Accordingly, Applicants respectfully request withdrawal of the rejection. Claims 3-5 and 7-9 depend from claims 1 and 2, accordingly, Applicants respectfully request withdrawal of the rejection.

In claim 10, the computation of correlation between a set of multiple transmission electron microscope images and the reference images is set forth. The reference images are stored with differing irradiation angles are stored. Neither Mann nor Van der Mast disclose this limitation of claim 10. Accordingly, Applicants respectfully request withdrawal of the rejection.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

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